Substance Abuse Trends in Maine: July through December 2006

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Report prepared by:

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Abstract

Alcohol remains the primary drug of abuse in Maine. Nearly 60% of clients admitted for substance abuse treatment during the period July 1 – December 31, 2006 had a primary problem with alcohol.

Cocaine, in both powder and crack forms, is reported to be readily available. While anecdotal reports suggest use of cocaine is widespread, the impact on treatment services continues to remain low compared to other drugs

Heroin has accounted for a slightly higher proportion of treatment admissions than cocaine. Informants have suggested that people addicted to opiate pharmaceuticals will use heroin if they cannot get access to their drug of choice. Generally, however, people prefer to use pharmaceuticals instead of heroin because they have more confidence in the level of purity of the drug.

Addiction to *other opiates* continues to rise, particularly among young adults. OxyContin is the primary drug of abuse among persons abusing opiates. Hospital admissions data from 2005 suggest that admissions related to opioid abuse or dependence were substantially higher than admissions for other types of abuse or dependence. Despite the existence of a statewide Prescription Monitoring Program that tracks all Schedule II, III, and IV prescriptions filled within the state, diversion of opioids and other prescription medication continues to be a problem. Abuse of *methadone* appears to be decreasing. Abuse of *buprenorphine* appears to be an emerging problem, most likely because the supply of buprenorphine has increased so quickly in Maine. In the period January 1 – June 30, 2005, there were 240 prescriptions for Subutex and 7,098 prescriptions for Suboxone filled in Maine. During June 1 – December 31, 2006, these numbers rose to 671 and 14,403 respectively.

Marijuana continues to be widely available. The Department of Public Safety reported that 61.2% (3,216) of arrests for drug related crimes (5,252) were related to the sale, manufacturing or distribution of marijuana in 2005. Use of *stimulants* and *depressants* in conjunction with other drugs is reportedly widespread, but they are rarely noted as the primary drug of abuse upon treatment admission.

Introduction

Substance Abuse Trends in Maine will be an ongoing series prepared every six months by the Maine Office of Substance Abuse (OSA) as a report by the Community Epidemiology Surveillance Network (CESN) in Maine. The CESN is a joint project of the OSA and the Maine Center for Disease Control and Prevention (MCDC) with the Maine Department of Health and Human Services (DHHS).

Area description

The estimated population of Maine in 2006 was 1,321,574. Most of the population was white (96.6%). Only .7% of the population was black, .5% was American Indian/Alaskan Native, .8% was Asian, .4% was of other races and 1.0% was two or more races. Less than one percent (.9%) was Hispanic. Illicit drugs continue to enter from other states and Canada.

Data Sources

Information for this report was gathered from a number of data sources. Primary strengths and/or weaknesses of data sources are noted below. While each indicator provides a unique and important perspective on drug use in Maine, none should individually be interpreted as providing a full picture of drug trends in Maine.

This report generally covers the period of July 1, 2006 to December 31, 2006. Older data was included when more recent data was not available. All of the data included in this report are reviewed for quality control. Based on this review, cases may be corrected, deleted, or added. Therefore, these data are subject to change. Detailed contact and source information is included at the end of this report. Information on each drug is generally discussed in the following order of sources:

1. Student substance use data for 2000, 2002, 2004, and 2006 came from the Maine Youth Drug and Alcohol Use Survey (MYDAUS) administered by the OSA to students in grades 6 through 12. Data from the 2003 and 2005 Youth Risk Behavior Survey (YRBS), covering grades 9 through 12, is included as well. The surveys are only administered on a biannual basis so cannot be used to track changes that may occur over shorter periods of time.

2. Use by persons aged 12 and older data came from the Substance Abuse and Mental Health Services Administration (SAMHSA) National Surveys on Substance Use and Health (NSDUH). The state estimates of use of illicit drugs in lifetime, past year, and past month for the population age 12 and older are based on the 2005 survey, and the regional estimates are based on data combined from the 2002, 2003, and 2004 surveys. Regional information was only available for seven regions defined as follows: Region 1 includes Cumberland County; Region 2 includes York County; Region 3 includes Androscoggin and Kennebec Counties; Region 4 includes Franklin, Oxford and Somerset Counties; Region 5 includes Knox, Lincoln, Sagadahoc, and Waldo Counties; Region 6 includes

Penobscot County; Region 7 includes Aroostook, Hancock, Piscataquis, and Washington Counties. The survey is conducted on an annual basis so cannot be used to track changes that may occur over shorter periods of time.

3. Poison Center data came from the Northern New England Poison Center. The Northern New England Poison Center provides services to Maine, New Hampshire, and Vermont. Data included information on number of questions received and numbers of confirmed exposures. For drugs with legitimate uses, exposure data only include intentional misuse. All exposures are included for illicit drugs. The primary strength of this data source is that information is collected and reported on a continual, daily basis. Data is only reflective of cases in which the Poison Center was contacted, however, so does not necessarily reflect statewide trends. Analysis was provided by the Center and by the author.

4. Hospital admission data for calendar year 2005 came from data obtained from the Maine Health Data Organization (MHDO). MHDO data includes all inpatient and outpatient admissions to all hospitals in Maine. Inpatient admissions totaled 163,166 and outpatient admissions totaled 3,851,903 during 2005. Data is compiled annually and is therefore not available on a more frequent basis. Analysis was by the author.

5. Treatment data were obtained from two sources. The primary limitation of treatment data is that trends in admissions to treatment lag behind use trends in the general population. Data from the OSA Treatment Data System (TDS) includes information about clients admitted to treatment in OSA-funded facilities through December 2006. The characteristics of clients who mentioned each particular drug as their primary drug of abuse are discussed. Analysis was by the author. Information from SAMHSA's Treatment Episode Data Set (TEDS) was included to provide regional and national comparative data.

6. Drug and alcohol arrest data come from the Uniform Crime Reports of the Maine Department of Public Safety (DPS). Arrest data may reflect differences in resources or focus of law enforcement efforts so may not be directly comparable from year to year.

7. Death data was provided by the Office of Data, Research and Vital Statistics (ORDVS), a program within the MCDC. Numbers reflect Maine resident deaths included in the death certificate statistical file that included any mention of the drug in question. Data include unintentional, self-inflicted, assault and undetermined intent deaths. Rates were calculated as death rates, according to total death figures as follows: 2000: 12,337; 2001: 12,403; 2002: 12,670; 2003: 12,530; 2004: 12,441; 2005: 12,859. 2005 data are preliminary. The death data are compiled on an annual basis so are not available to track changes that may occur over shorter time frames.

8. Information on drugs identified by laboratory tests are from the DHHS Health and Environmental Testing Laboratory, forensic section, which reported results from toxicological analyses of substances submitted in law enforcement operations for the first half of calendar year 2007, to the National Forensic Laboratory Information System

(NFLIS) of the federal Drug Enforcement Agency (DEA). Data reflect only those cases referred to the laboratory so are not necessarily reflective of all samples seized in Maine. Analysis was by the author.

9. Information on forms of methadone and distribution of other pharmaceuticals is from the federal Drug Enforcement Administration's (DEA) Automation of Reports and Consolidated Orders System (ARCOS). ARCOS data only provides a sense for the level of distribution of pharmaceuticals into Maine and should not be viewed as a definitive marker of patterns of abuse among the population.

10. Price, purity, trafficking, distribution and supply information was provided by annual reports on trends in trafficking from the MDEA, the federal DEA's Domestic Monitor Program, and the National Drug Intelligence Center's Drug Market Analysis.

11. Anecdotal reports on drug trends were collected by the author from a select group of **key informants**, consisting of law enforcement, health care, and social service professionals. Each informant provides an important perspective about a particular segment of the population and/or a particular area of the state.

Drug Abuse Trends

COCAINE/CRACK

The MYDAUS suggests that lifetime and past month use of powder and crack cocaine by 6th through 12th grade students has remained relatively stable since 2000. In 2006, 4.5% of students reported any lifetime use. In comparison, 4.6% of students in 2000, 4.8% of students in 2002, and 4.6% of students in 2004 reported any lifetime use. An estimated 1.8% of students reported using powder or crack cocaine in the past month in the 2006 survey. Survey results since 2000 have showed similar patterns, with 1.7% of students in 2000, 2.1% of students in 2002, and 2.0% of students in 2004 reporting past month use of cocaine. The YRBS suggests that 7.6% of high school students had used cocaine in their lifetime in 2005. This percentage has not changed significantly from the percent (8.3) that reported lifetime use in 2003.

The 2004-2005 NSDUH estimated that 2.5% of Mainers and 2.5% of the entire Northeast region of the United States aged 12 and older had used any form of cocaine in the past year. Past year use was highest among persons aged 18 to 25 (9.1%). Within Maine, past year use of cocaine was highest (2.94%) in Region 1 (Cumberland County) and lowest (2.06%) in Regions 2 (York County) and 5 (Knox, Lincoln, Sagadahoc, and Waldo Counties).

Cocaine-related exposures reported to the Northern New England Poison Center rose since 2000 and have remained fairly steady since 2004. In 2001, there were 0 exposure calls for crack and 14 calls for powder. In 2002, there were 2 calls for crack and 33 calls for powder, in 2003, there were 2 calls for crack and 29 calls for powder, and in 2004 there were 8 calls for crack and 42 calls for powder. In 2006, there were 7 exposures for crack and 39 for powder cocaine. Most (91.3%) of the 2006 exposures were for adults aged 20 or older. Of those in which gender was known (what %?), 63.2% exposures were male.

MHDO data show that there were 62 admissions to inpatient hospital services for cocaine abuse and dependence in 2005. 29 (47%) of the admissions were for persons residing in Cumberland County. There were 653 admissions to outpatient hospital services for cocaine abuse and dependence in 2005. As a percent of all hospital admissions, cocaine was involved in only .02% of outpatient and .04% of inpatient admissions.

The percent of deaths mentioning cocaine has remained lower than one percent, but has been increasing (Figure 1).

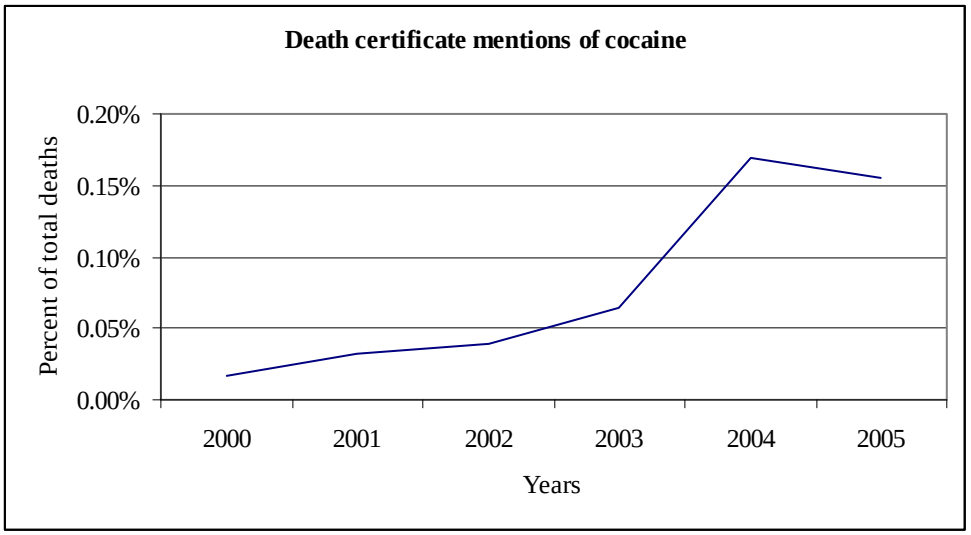


Figure 1.

Cocaine (crack and powder together) represented 4.2% of all admissions to OSA-funded treatment programs during July 1, 2006 – December 31, 2006. Abusers of powder cocaine made up 3.0% of admissions to treatment (Figure 2).

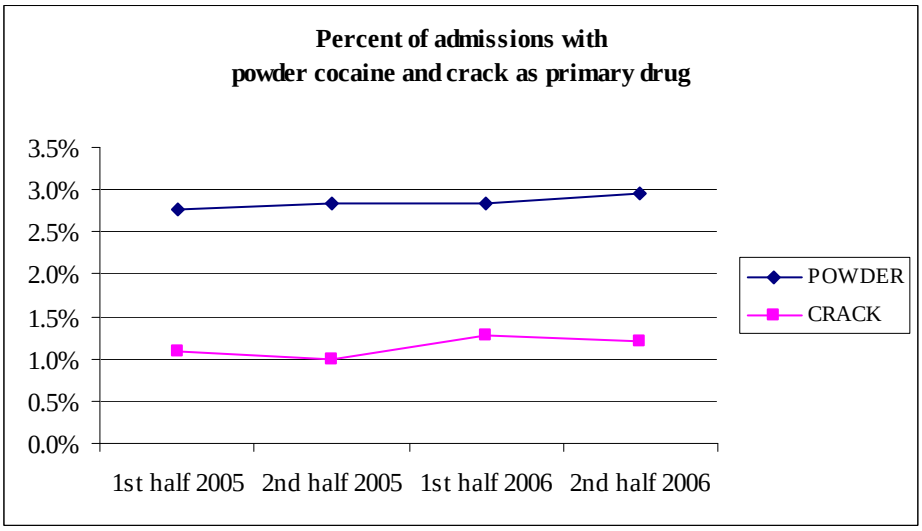


Figure 2.

Route of administration has changed over the past couple of years. The percentage of cocaine-related admissions to treatment reporting inhaling cocaine powder has decreased, from approximately 43.5% in to 38.6% in the period July 1, 2006 to December 31, 2006. A concurrent increase has been seen in the percentage of admissions smoking cocaine, from 29.3% in to 34.4% in the same time period. Only a small percentage use cocaine in other ways. The percentage of admissions smoking crack cocaine have stayed consistently over 90% from the first half of 2005 until the second half of 2006. For crack

admissions during the second half of 2006, 86.7% reported smoking crack, 5.1% reported injecting, 5.1% reported taking crack orally, and 3.2% reported inhaling. Anecdotal reports have suggested, however, that injecting is becoming more prevalent in the Portland area.

In the second half of 2006, more than half (53.6%) of the substances identified by the state forensic lab were cocaine. Of the 315 samples detected, most (108 or 34.5%) were from Cumberland County. Androscoggin, Penobscot and York counties had similar amounts (40, 38 and 37 samples, respectively).

Cocaine in both powder and crack forms has been readily available throughout Maine in recent years, but key informants suggest that supply may have increased over the last 18 months. Informants suggest that powder cocaine may be more available than crack as it is associated with less severe criminal penalties. Powder is currently more expensive than crack, and so is more often used by youth aged 16 and older who have jobs and can afford it. Powder has been becoming cheaper in recent months, however, possibly to compete with the lower prices of crack.

According to anecdotal reports, methadone patients have been using cocaine in addition to methadone. Informants believe that cocaine and crack use is very common among persons abusing opiates. Informants note peaks and valleys in overall levels of use, suggesting that these shifts may relate to changes in supply.

Interstate 95 provides a direct route to Maine distribution points (Portland and Lewiston) from larger cities in Massachusetts and New York. Drug enforcement sources believe that powder cocaine is obtained from Colombian cartels and is distributed by gangs from the Methuen and Lawrence areas of Massachusetts.

Crack cocaine dealers have been noted to travel from Boston or New York City into Maine, unloading as much as $7-$8,000 worth of supply in a weekend. The increased availability of crack is believed to be tied to increased levels of distribution from criminal groups and street gangs based in Massachusetts.

Types of seizures by law enforcement have changed in recent years. Whereas the MDEA used to seize smalls bags of cocaine, now they are seizing much larger portions (kilograms) at a time. In 2006, 43% of MDEA arrests were for cocaine related offenses. This percentage has been slowly rising in recent years. Current projections for 2007 suggest that 45% of MDEA arrests will be cocaine related. In the MDEA arrested 94 persons for offenses related to cocaine and crack. During this same time period, the MDEA seized 16 pounds of cocaine and 4 pounds of crack cocaine. The MDEA reports that cocaine is available throughout the state in fractional-ounce to kilogram quantities.

The Maine Attorney General's office reports that the percentage of drug-related prosecutions related to cocaine has steadily increased over the past few years. As of July 1, 2007, approximately 32% of the year-to-date cases were tied to powder cocaine and 13% were tied to crack cocaine.

ALCOHOL

Alcohol remains the primary drug of abuse in Maine. In 2006, 47.7% of students in grades 6 through 12 had ever used alcohol and 29.0% had drunk alcohol in the last month. Alcohol use increased with grade level, as 5.9% of 6th graders had used alcohol in the past month, compared to 49.1% of 12th graders in 2006. Lifetime prevalence of alcohol use for female students was significantly higher than rates for males. Of particular concern is heavy consumption of alcohol, or binge drinking, which is defined as drinking five or more drinks at one time. In 2006, 14.6% of all 6th through 12th grade students said that they drank five or more drinks at one time during the past two weeks. Binge drinking increased with grade level. Among seniors, 29.4% binged in the last two weeks. This percentage has remained steady since 2000 (29.2% in 2000). Rates of binge drinking within the last two weeks were significantly higher among male students.

The 2004-2005 NSDUH estimated that 51.5% of Mainers age 12 and older had drunk alcohol in the past month and 21.0% had drunk five or more drinks on at least one day (binge drinking) in the past month. These rates are slightly lower than the Northeast region as a whole for the same time period (55.2% and 23.8% respectively).

MHDO data show that there were 1,408 admissions to inpatient hospital services as a result of alcohol abuse or dependence in 2005. There were 53 admissions to outpatient services due to alcohol poisonings and 10,931 admissions to outpatient services due to alcohol abuse or dependence. As a percentage of all hospital admissions, alcohol was involved in less than 1% of outpatient and inpatient admissions.

In the second half of 2006, 59.5% of clients admitted to publicly funded treatment programs had a primary problem with alcohol. The characteristics of alcohol admissions have remained fairly consistent in recent years. During the past two years, approximately 77% of total clients admitted for alcohol use were male. Alcohol has remained the primary drug of abuse for both males and females. Figure 3 shows the percent of all male admissions and the percent of all female admissions that reported alcohol as the primary drug of abuse over the last two years.

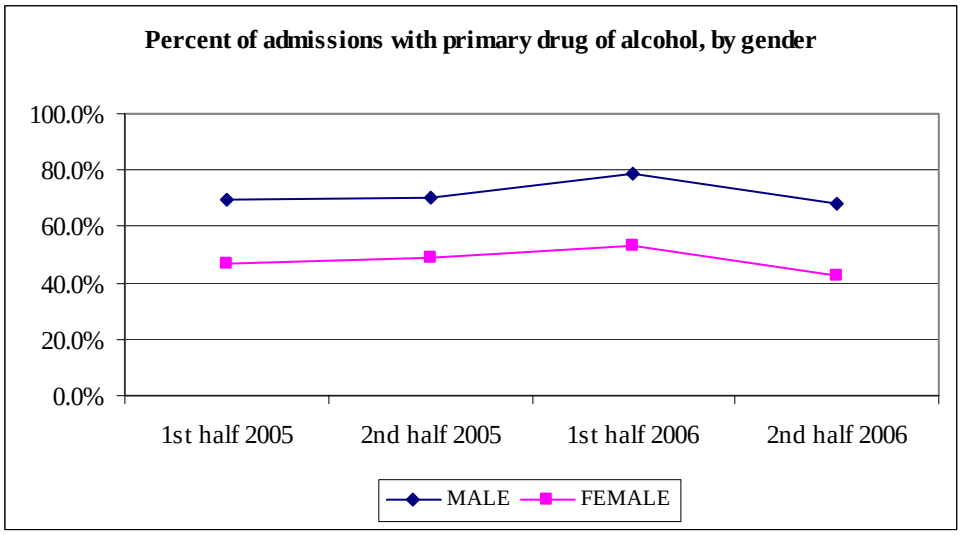


Figure 3.

Clients admitted for a primary problem with alcohol had an average age of 38 in the time period July 1, 2005 to June 30, 2006. Nearly ten percent of clients admitted for alcohol during the same time period were under the age of 21.

More than a fifth of clients admitted for a primary problem of alcohol during the past two years were referred by the Maine Driver Education and Evaluation Program (DEEP). The DPS reports that arrests for driving under the influence have remained fairly stable, with the same number of arrests occurring in 2004 and 2005 (7,274). In calendar year 2005, most arrests were male (78.5%).

HEROIN

The MYDAUS suggests that past month use of heroin by 6th through 12th graders has remained steady in recent years, from 1.1% in 2002 to .9% in 2006. Some 1.8% of students reported ever using heroin in the 2006 survey. Rates of lifetime and past month use were significantly higher for male students.

Thirteen heroin exposures were reported to the Northern New England Poison Center in 2006. Most (84.6%) were persons 20 to 29 years of age.

MHDO admissions data for poisonings suggests that 40 admissions to outpatient hospital services were due to poisoning related to heroin in 2005. Twenty-one (53%) of these were in Cumberland County. Of ten inpatient admissions related to poisoning from heroin, six occurred in Cumberland County. Poisonings from heroin comprised only a very small portion (.001% of outpatient and .006% of inpatient) of admissions to hospitals.

Heroin is a type of opioid and is often, for data purposes, included within a general opioid category. Admissions related to diagnosis code are grouped as opioids within the MHDO data, so information on heroin cannot be separated out. Opioids include heroin, meperidine, methadone, morphine, opium, opium alkaloids and their derivatives, and synthetic drugs that have morphine-like effects. Data from 2005 suggest that admissions related to opioid abuse or dependence were higher than admissions for other types of abuse or dependence. An estimated 10,982 admissions to outpatient services were related to opioid abuse and an additional 405 outpatient admissions were related to the combined use of opioids and other types of drugs (.30% of total outpatient admissions). Another 574 inpatient admissions (.35%) were related to opioid abuse or dependence.

Heroin represented 5.4% of all admissions to OSA-funded treatment programs in the second half of 2006, down from 6.4% in the first half of 2005 (Figure 4). In terms of raw numbers, nearly equal numbers of males and females entered treatment for heroin misuse (Figure 5).

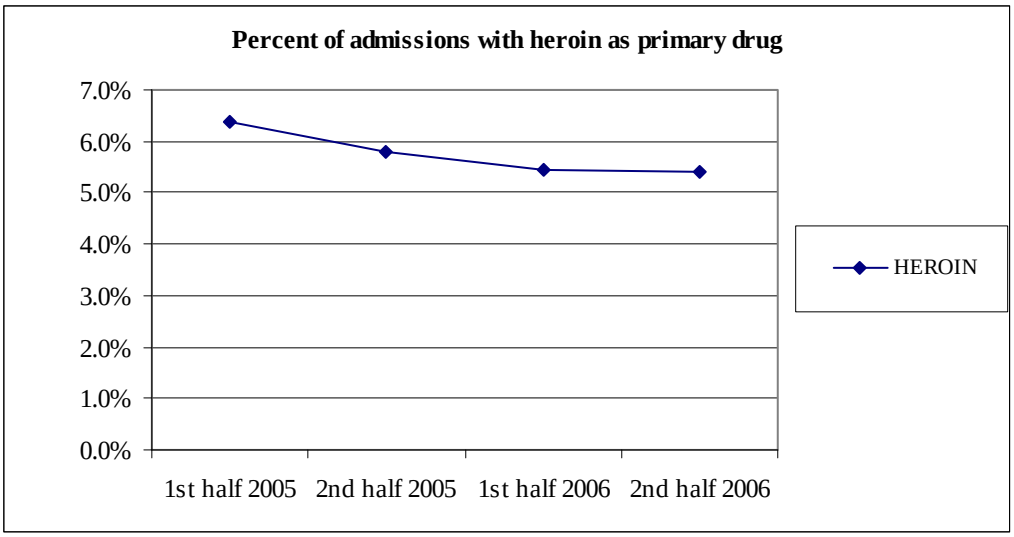


Figure 4.

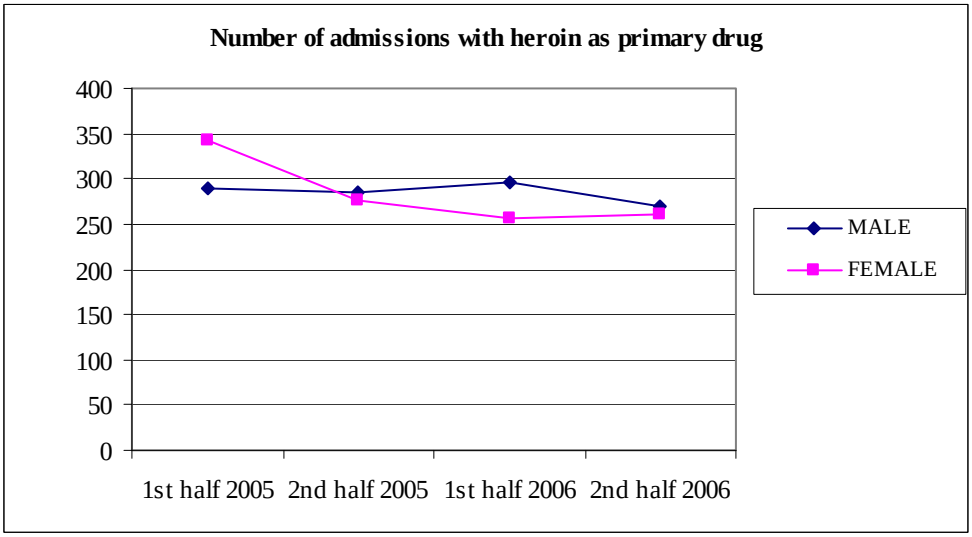


Figure 5.

Treatment admissions data suggest that the primary routes of administration for heroin have remained consistent over the past two years. In the second half of 2006, 75.5% reported injection as the primary route of administration and 19.1% reported inhalation.

Death certificate mentions of heroin have remained low. In 2000, 2003, and 2004, only one death per year mentioned heroin. Zero mentions were made in 2001 and three were made in 2002. Preliminary 2005 data suggest only three mentions.

Heroin was detected in only 5.6% (33) of the 587 substances examined by the state forensic lab in the first half of calendar year 2007. Six samples were identified from Penobscot County and five samples were identified in each of the following counties: Androscoggin, Cumberland, Kennebec, and Washington. No heroin samples were detected from Aroostook, Franklin, Hancock, Piscataquis, Somerset, and Waldo counties.

Heroin use is common in many areas of the state, but low in some. Use is reportedly high in Hancock and Penobscot counties but low in the Lewiston area, particularly among youth aged 16 and older. Youth reportedly fear using needles so are less apt to use heroin than other illicit substances. Persons who do use heroin mostly inject but also snort and smoke heroin. Heroin is very rarely the only drug being used. Cocaine is often used with heroin. Use of "cheese" heroin, heroin mixed with over-the-counter cold medicine that contains acetaminophen and the antihistamine diphenhydramine, is just starting to be reported in the southern portion of the state.

Informants suggest that people addicted to opiate pharmaceuticals will use heroin if they cannot get access to their drug of choice. Generally, people prefer to use pharmaceuticals because they have more confidence in the level of purity of the drug.

During the period July 1, 2005 to June 30, 2006, the MDEA arrested 670 persons for drug-related offenses. Heroin was the drug of concern in 17 arrests. Seizures resulting from this enforcement activity included .6 pounds of heroin. The types of seizures have changed over the past year. Whereas small bags used to be seized, half ounce chunks called "fingers" are now more often seized by law enforcement.

In the Lewiston area, supply has been steady over the past six months, but has decreased slightly over the last few years. In the Penobscot County area, supply has become more available and cheaper than in the past. In addition, purity is higher than it has ever been. Dealers are able to get heroin cheaply in Massachusetts and to sell it for a high profit in Maine. Massachusetts-based Dominican traffickers continue to be the primary suppliers of high quality heroin to the Maine distributors.

MARIJUANA/CANNABIS

Marijuana use in Maine continues to be a significant issue, for youth in particular, but also for the general population as well. Marijuana is the second drug of choice for youth, after alcohol. One-quarter of students in grades 6 through 12 reported any lifetime use of marijuana in 2006. Past month use dropped from 15.6% in 2000 to 14.1% in 2006. Use increased with grade. Only 1.9% of 6th graders reported any lifetime use, but 49.7% of seniors reported lifetime use in 2006. Rates of lifetime and past month use were significantly higher for male students.

The 2004-2005 NSDUH estimated that 8.55% of Mainers age 12 and older had used any form of marijuana in the past month. Past month use in the regions, based on 2002-2004 NSDUH, was highest (9.22%) in Region 1 (Cumberland County) and lowest (6.74%) in Region 7 (Aroostook, Hancock, Piscataquis, Washington Counties). Highest past month use was reported by those aged 18-25 (24.6%). Rates of past year use were higher in Maine (12.6%) than in the Northeast region as a whole (11.6%).

In 2006, 121 exposures to marijuana were reported to the Northern New England Poison Center. Most (62.8%) were male and age 20 or over (63.6%).

MHDO data show that there were 4 admissions to inpatient hospital services for marijuana abuse and dependence in 2005. There were 930 admissions to outpatient hospital services for marijuana abuse and dependence in 2005.

Admissions to substance abuse treatment for marijuana abuse have been decreasing. Marijuana represented 6.8% of all admissions to OSA-funded treatment programs in the second half of 2006 (Figure 6). Admissions differed by gender,

however, with admissions for marijuana comprising a larger percentage of all female admissions (8.5%) than male admissions (4.0%).

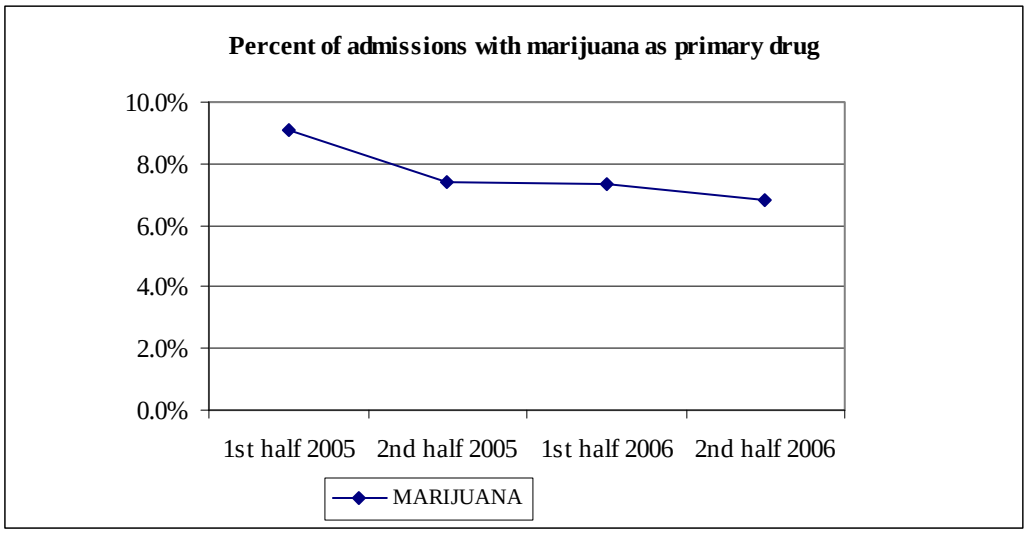


Figure 6.

Marijuana and hashish comprised 8.0% (47) of the 587 drug samples tested by the state forensic lab in the first part of calendar year 2007. Washington County accounted for ten of these 47 samples.

The DPS reported that 61.2% (3,216) of arrests for drug related crimes (5,252) were related to the sale, manufacturing or distribution of marijuana in 2005.

Marijuana is plentiful and readily available in Maine. It is commonly cultivated year-round indoors, but high-grade marijuana cultivated in Canada has been smuggled over the border. In the summer months, a large supply is available from local farms in the Livermore Falls, Lisbon and Turner areas surrounding Lewiston. Commercial-grade marijuana is often obtained from middlemen in the southern New England states and New York. Hashish is available sporadically in small quantities, but the increasing popularity of hashish in Canada may change the situation in Maine. Traffickers have moved hashish and hash oil through Maine and into Canada. Caucasian traffickers typically supply locally grown marijuana as well as marijuana shipped from the southwest border and Canada. Shipments ranging from 15 to 500 pounds typically enter the state via Interstate 95 in automobiles, campers, rental trucks, and tractor-trailers. Motorcycle groups continue to control much of the marijuana distribution in Maine, using associates to distribute approximately 300 to 500 pounds monthly.

MDEA seized 60.1 kilograms of marijuana in 2006 and 329.6 kilograms in 2005. Enforcement activity often reflects the availability of resources to devote towards a particular problem. The amount of funds provided to the MDEA for marijuana eradication shifts from year to year. In the past, the MDEA could easily spot large plots of marijuana by using helicopters. Now, however, cultivators are splitting their crops up into smaller plots of five plants per plot making identification from the air more difficult.

PHARMACEUTICALS

To provide some perspective on drug trends related to the use of prescription drugs, information is combined here from several categories. Prescription drugs include opiates, stimulants, depressants, and steroids. Opiate abuse is of particular concern in Maine.

Some sources do not separate out different types of prescription drugs within their data collection and reporting. The 2006 MYDAUS, for example, only reports non-medical use of prescription drugs. Results from the 2006 survey suggest that lifetime use of pharmaceuticals was 12.0% in 2006, while past month use dropped from 7.8% in 2004 to 6.0% in 2006. Rates of lifetime non-medical use of prescription drugs were significantly higher for female students but there was no significant difference between genders for past month prescription use.

In 2004, approximately 18% of the arrests made by MDEA and 21% of the drug-related prosecutions by the Attorney General involved prescription drugs. As of July 1, 2007, approximately 20% of the drug-related prosecutions conducted by the state attorney general's office involved pharmaceuticals.

Pharmaceutical abusers are increasingly obtaining prescription drugs such as OxyContin (oxycodone) and Dilaudid (hydromorphone) illegally over the Internet from distributors based in the US. The US based distributors obtain wholesale quantities of prescription drugs from foreign sources of supply in Brazil, China, and Serbia.

OPIATES (EXCLUDING HEROIN)

This group excludes heroin but includes opiates such as methadone, codeine, hydrocodone (Vicodin, Tussionex), oxycodone (OxyContin, Percodan, Percocet-5, Tylox), d-propoxyphene (Darvon), hydromorphone (Dilaudid), morphine, meperidine (Demerol) and opium.

In the 2004-2005 NSDUH, 4.93% of Mainers age 12 and older reported non-medical use of pain relievers in the past year. This percentage is slightly higher than the Northeast region as a whole (4.44%). Similar levels were reported for Maine in the 2003-2004 survey (5.02%). Use was higher among younger persons; with 8.4% of persons aged 12-17 and 13.4% of persons aged 18-25 reporting past year use. Only 3.2% of persons aged 26 and older reported past year non-medical use of pain relievers. Past year use in the regions, based on data from the 2002-2004 NSDUH was highest (5.25%) in Region 6 (Penobscot County) and lowest (4.25%) in Region 5 (Knox, Lincoln, Sagadahoc, and Waldo Counties).

In 2006, 34.0% of the Northern New England Center Poison Center calls from youth age 13 to 19 concerned opioids. Of all of the drug identification and question calls received by the Poison Center in 2006, 35.3% concerned opioids. Of 347 opioid exposures reported in 2006, 79.0% were age 20 or older. Approximately equal numbers of males (175) and females (172) were included.

As mentioned earlier, MHDO data from 2005 suggest that hospital admissions related to opioid abuse or dependence were higher than admissions for other types of abuse or dependence. An estimated 10,982 admissions to outpatient services were related

to opioid abuse and an additional 405 outpatient admissions were related to the combined use of opioids and other types of drugs. Another 574 inpatient admissions were related to opioid abuse or dependence. MHDO data show that 137 outpatient hospital admissions were due to opioid poisoning and 72 inpatient admissions were due to poisonings related to other types of opioid use in 2005.

Data from TEDS show that the percent of admissions to treatment for persons abusing opiate pharmaceuticals is much higher in Maine than in the nation as a whole. Approximately 17.3% of total substance abuse treatment admissions in Maine were related to non-medical use of pain relievers in 2005, but only 3.7% of admissions in the US as a whole were related to similar types of misuse.

Over ten percent (11.6%) of the 587 samples tested by the state forensic lab in the first half of calendar year 2007 detected oxycodone, codeine, morphine, methadone, or tramadol. Washington County contributed more of these samples (17) than other counties. Cumberland County contributed nine, Penobscot County contributed seven, and other counties contributed five or fewer samples a piece.

During the period July 1, 2005 to June 30, 2006, the MDEA arrested 49 persons due to offenses involving synthetic narcotics. More broadly, the DPS reported that 8.1% (425) of drug-related arrests were associated with the sale, manufacturing or possession of synthetic narcotics in 2005. Less than ten percent (8.7%) of these arrests were for minors under the age of 18.

The state continues to experience an increase in the availability of diverted pharmaceuticals. Primary methods of diversion being reported are illegal sale and distribution by health-care professionals and workers. Oxycodone products such as Percocet, Roxicet, and OxyContin are readily available. Dilaudid is found in Washington County, including the city of Calais. Instances of doctor-shopping schemes, falsified prescriptions, and pharmacy robberies of OxyContin have been experienced in Lincoln County and the Portland area. Diverted Canadian pharmaceuticals also are being smuggled into Maine.

As shown in Figure 7, opiates contribute to only a small portion of overall deaths in Maine. Data from the death certificate file suggest that the rate of deaths from opiates has been increasing since 2000, however. The category “other opioids” includes codeine and morphine and the category “other synthetic narcotics” includes pethidine.

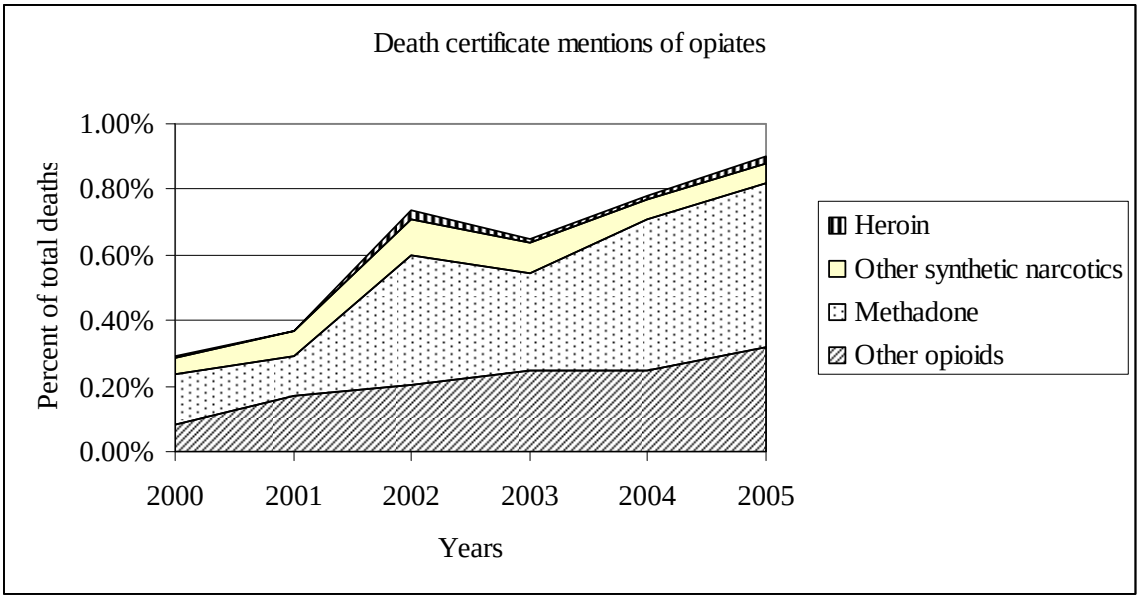


Figure 7.

Methadone. Methadone is used in liquid and 40-milligram diskette forms in narcotic treatment programs. The 40-milligram diskettes, as well as 5- and 10-milligram tablets are used in pain management.

One hundred methadone exposures were reported to the Northern New England Poison Center in 2006. Most (75%) were age 20 or older. Two-thirds (66%) were male.

Thirty outpatient admissions were related to methadone poisoning and 46 inpatient hospital admissions were due to methadone poisoning in 2005.

Although methadone abuse has been noted as a problem on the street, abuse seems to be decreasing. Some liquid and some prescription pills are noted. Informants disagree as to whether most abuse occurs from the scored wafers provided by medication assisted therapy clinics or from diversion of prescriptions for pain management. Method of use varies from swallowing and snorting to crushing and shooting. Some methadone clinic clients in the Portland area, however, have been selling their methadone to fund cocaine purchases. Methadone is reportedly cheaper than other narcotics sold on the street.

Buprenorphine. ARCOS data can be used to track changes in the distribution of pharmaceuticals. In 2005, Maine had the second highest level of buprenorphine distribution per 100,000 people, measured in grams, among all 50 states and Puerto Rico. Buprenorphine distribution was 323.13 grams per 100,000 people in Maine, compared to 581.28 in the state with the highest level, Vermont. The state with the third highest distribution (203.90 grams per 100,000 persons) was also in the New England region – Rhode Island. Anecdotal evidence suggests that abuse of buprenorphine (Suboxone, Subutex) is increasing in Maine during this reporting period and that supply is easily available.

Diversion of Suboxone appears to be an emerging problem in certain areas of the state. The MDEA has purchased Suboxone on the street in four counties to date. The Lewiston area has not seen much misuse of Suboxone, other than by persons with severe opiate abuse disorders. People using Suboxone have figured out how to separate out the Naloxone from the buprenorphine so are injecting and snorting the buprenorphine, in addition to using a sublingual route of administration (i.e. dissolving pills in their mouth). The supply of Suboxone has gotten much easier as the availability to prescribe Suboxone has spread. Raw numbers of prescriptions from the Maine Prescription Monitoring Program demonstrate a rapid increase in number of prescriptions. In the first half of 2005, there were 240 prescriptions for Subutex and 7,098 prescriptions for Suboxone filled in Maine. By the second half of 2006, these numbers had risen to 671 and 14,403 respectively.

One substance abuse treatment provider reports that users are knowledgeable about the effects of Suboxone, telling treatment intake staff exactly how many milligrams they need to take to remain stable. Suboxone is also reportedly much cheaper on the street than it is via prescription.

Oxycodone. Oxycodone (including OxyContin) represented 9.7%, OxyContin represented 8.0% and other narcotics represented 1.3% of all admissions to OSA-funded treatment programs in the second half of 2006 (Figure 8).

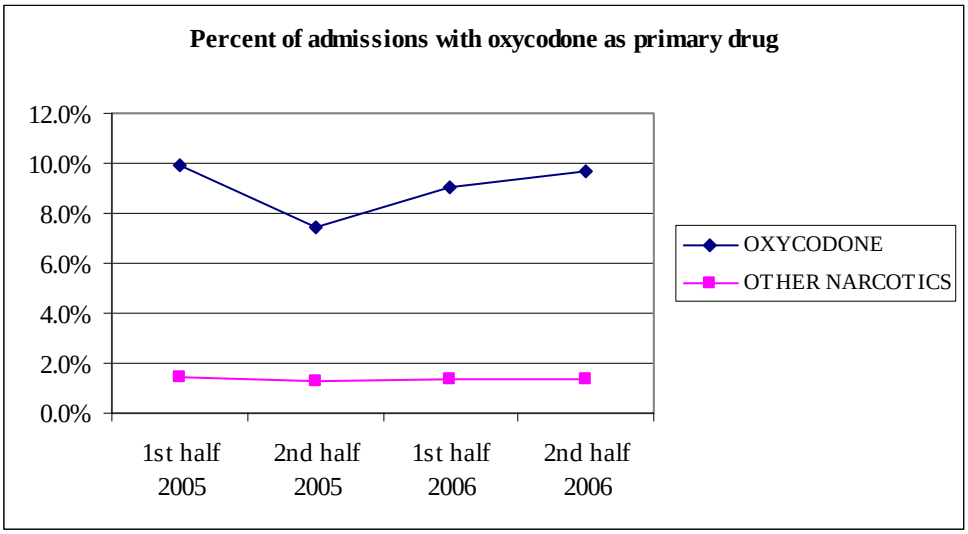
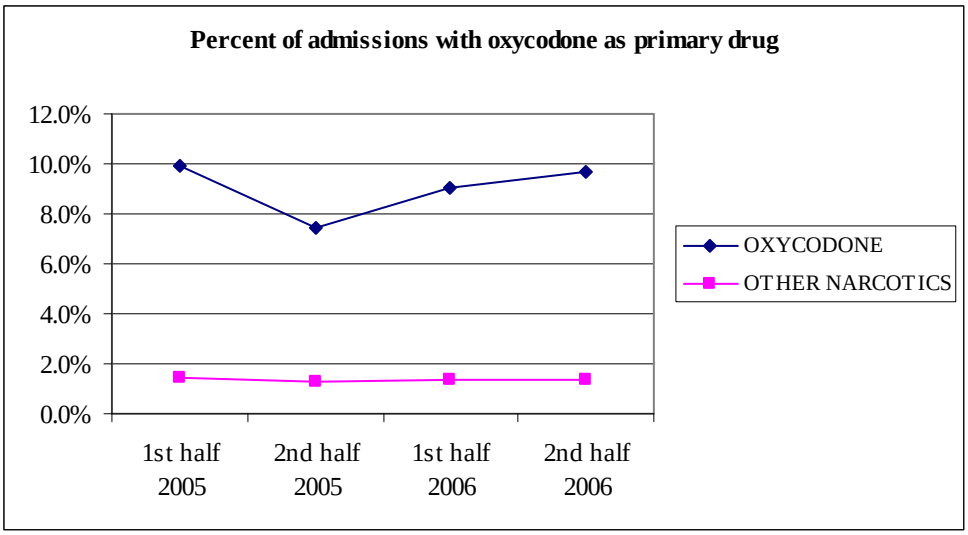


Figure 8.



The primary route of administration of OxyContin, the most commonly abused opiate, has been shifting. In the first half of 2005, 47.4% of persons admitted for OxyContin use reported inhaling. The percentage rose to 52.3% in the second half of 2006. The percent reporting injecting declined from 34.6% in the first half of 2005 to 27.0% in the second half of 2006. More admissions reported using OxyContin orally (17.9%) in the second half of 2006 than in the first half of 2005 (15.3%).

Abuse of OxyContin has consistently made up a higher percentage of total substance abuse treatment admissions among women than among men (Figure 9).

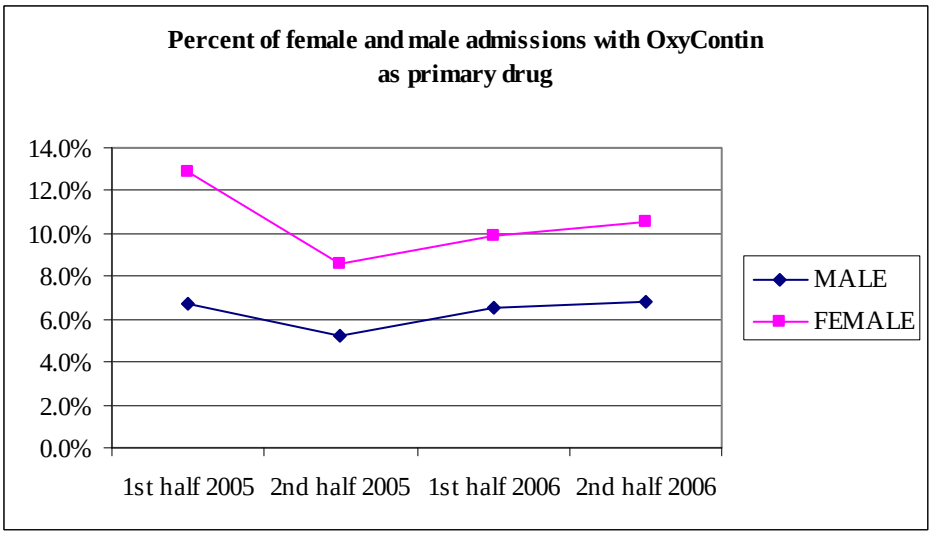


Figure 9.

Opiates are readily available in Maine. Youth aged 16 and older are aware of which symptoms they should report at a hospital emergency room to secure a 7-day supply. Since pharmaceuticals given out by emergency room staff are not tracked by the state Prescription Monitoring Program, an easy opportunity for diversion exists. Vicoden abuse was noted as a particularly large problem among youth in the Lewiston and

Penobscot County areas. Youth are selling Vicoden capsules for $4 a piece. OxyContin is the most expensive opiate, selling for a reported $1 to $1.50 per milligram.

Anecdotal reports suggest that once MaineCare removed OxyContin from its formulary, prescriptions for methadone and morphine increased.

Users may swallow, crush and snort, or crush and inject these types of pharmaceuticals. Among young people, "pharming", a practice of mixing various prescription drugs into a container and randomly ingesting a handful of the drugs, is of great concern. Youth also discuss using "super salads", mixes of pills. For the elderly, multiple prescriptions may cause unintended consequences without close monitoring for drug interactions.

STIMULANTS

Amphetamine-type substances come in different forms and with different names. "Speed" ("meth", "crank"), powdered methamphetamine of relatively low purity, can be snorted or injected and is sold in grams or ounces. Amphetamine pills can be either pharmaceutical grade stimulants or methamphetamine powder that has been pressed into tablets. Pills can be taken orally, crushed for inhalation, or dissolved in water for injection.

The 2006 MYDAUS reported that lifetime use of stimulants was 3.3% in 2006. Some 1.5% of students had used stimulants in the past month. The YRBS reported a significant decrease in lifetime usage of methamphetamine by Maine high school students from the 2003 to the 2005 surveys (8.3% in 2003 to 5.2% in 2005).

Exposures tracked by the Northern New England Poison Center during 2006 indicate that 204 exposures to stimulants occurred. Of these 204 exposures, eleven involved children age six through twelve, 90 involved teens aged 13 to 19, and 55 involved young adults age 20 to 29. No significant gender differences existed.

Death certificate mentions of stimulants remained low from 2001 to 2004, with only one mention each year. Preliminary data from 2005 suggest an upward trend, however, with five recorded mentions.

MHDO data show that there were 5 admissions to inpatient hospital services for stimulant abuse and dependence in 2005. There were 64 admissions to outpatient hospital services for stimulant abuse and dependence in 2005. Admissions for stimulant poisonings, including poisonings from amphetamine, caffeine and other central nervous system stimulants, totaled 105 (76 outpatient and 29 inpatient admissions). Including poisonings, stimulants were involved in .004% of outpatient and .02% of inpatient hospital admissions.

Stimulants represented less than one percent of all admissions to OSA-funded treatment programs in the second half of 2006. In absolute numbers, only 17 admissions were for methamphetamine and only 29 admissions were for other amphetamines in the second half of 2006 (Figure 10).

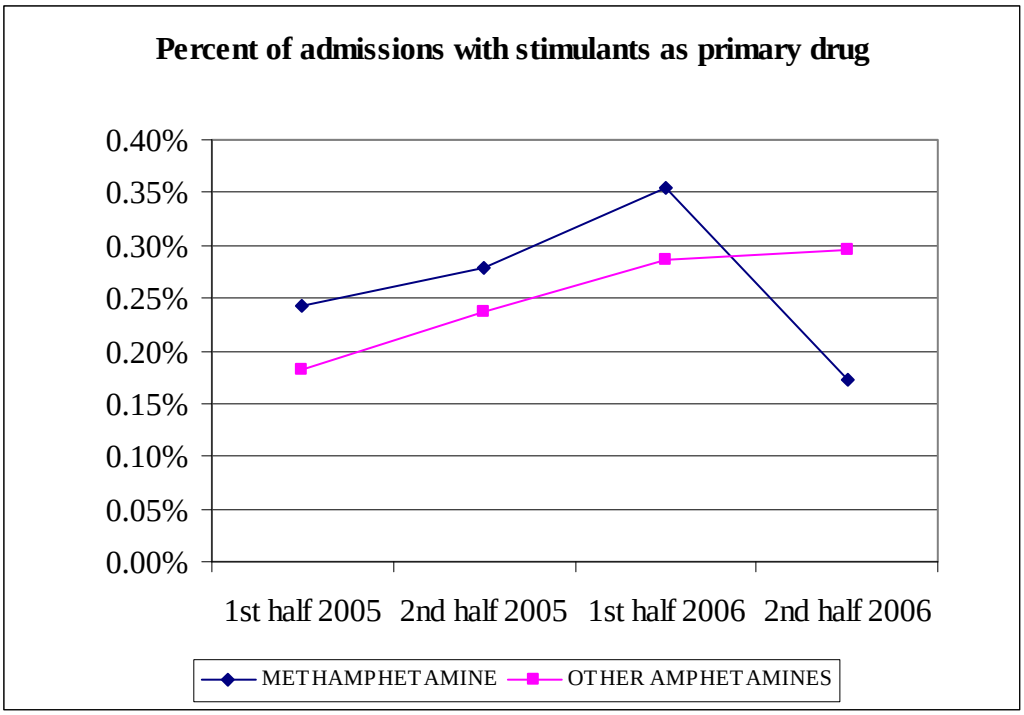


Figure 10.

The state forensic lab identified 14 samples of methamphetamine in the first half of calendar year 2007. Eleven of these 14 samples were found in Aroostook County.

In 2006, four methamphetamine laboratories were discovered by the MDEA. They were located in Auburn, Bangor, Lewiston and Caribou. MDEA estimates that less than one percent of arrests are related to methamphetamine use or distribution. Five labs were discovered in 2005.

Overall, methamphetamine use in Maine continues to be quite low. Methamphetamine use is reportedly substantially higher in Aroostook County than in other parts of that state, however. Users smoke, snort and inject methamphetamine. Informants have heard of a lot of cocaine users trying methamphetamine but not enjoying it. In the Lewiston area, youth ages 16-19 are more likely than other adults to be using. The Penobscot County area reports an increase in reports of methamphetamine use, but overall numbers still remain low.

Methamphetamine is fairly easy to obtain. Even though local production has decreased given changes in access to precursor materials, trafficking from elsewhere has increased. Tablets called “yaba” enter Maine from Canada and crystal methamphetamine is brought in from the western United States. Low-quality methamphetamine is often express-mailed into the state from California and the southwestern states.

According to anecdotal reports, amphetamine use is most common among youth aged 16 and older in the Lewiston area. In the Penobscot County area, more adults are abusing amphetamines than in the past, possibly because the supply has increased as prescriptions have risen. Users swallow or snort amphetamines. Supply is easy and has remained consistent. Youth may sell prescription Ritalin for $2 to $4 per pill. Pill swapping at parties continues to be a problem in Androscoggin County. Use is most often

seen in people abusing other pharmaceuticals. The state forensic lab identified 6 samples of methylphenidate in the first half of 2007.

DEPRESSANTS

This "downer" category includes three groups of drugs: barbiturates, such as Phenobarbital and secobarbital (Seconal); nonbarbiturate sedatives, such as methaqualone, over-the-counter sleeping aids, chloral hydrate, and tranquilizers; and benzodiazepines, such as diazepam (Valium), alprazolam (Xanax), flunitrazepam (Dalmane), lorazepam (Ativan), and chlordiazepoxide (Librium and Librax).

The Northern New England Poison Center notes that 9.3% of calls from teens age 13 to 19 and 12.7% of all calls involved benzodiazepines or benzodiazepine-like substances in 2006. The number of drug identification calls for sedatives has increased from 3,422 in 2005 to 4,975 in 2006.

The rate of deaths with a mention of benzodiazepines has remained near one per 100,000 people. Ranging from below one in 2000, 2001, and 2004 (.63, .86 and .84 per 100,000) to over one in 2003 and 2005 (1.5 and 1.4 per 100,000).

MHDO data show that there were 289 admissions to outpatient hospital services and 156 admissions to inpatient hospital services for benzodiazepine-related poisonings in 2005. Poisonings by barbiturates accounted for 58 outpatient admissions and 28 inpatient admissions. Abuse or dependence of sedatives, hypnotics or anxiolytics including barbiturates and tranquilizers were the cause of 70 outpatient admissions and 19 inpatient admissions in 2005. As a group, depressants were related to .01% of outpatient and .12% of inpatient hospital admissions in 2005.

Depressants as a primary drug of abuse represented only a small portion of admissions to OSA-funded treatment programs, from 1.78% in the first half of 2005 to 2.20% in the second half of 2006.

Seven samples of alprazolam and seven samples of clonazepam were identified by the state forensic lab in the first half of 2007.

Misuse of benzodiazepines such as Valium and Xanax is more common among youth than among adults. Users swallow these pills obtained from home medicine cabinets. Benzodiazepines may be used within "super salads", mixtures of prescription pills.

STEROIDS

Data from the YRBS show no significant change in reported lifetime use of steroids among high school students from 2003 to 2005 (4.8% and 4.0%, respectively).

CLUB DRUGS AND HALLUCINOGENS

DEXTROMETHOPHAN

The most popular dextromethorphan (DXM) products are Robitussin-DM, Tussin, and Coricidin Cough and Cold Tablets HBP, which can be purchased over the counter and can produce hallucinogenic effects if taken in large quantities. Coricidin HBP pills are known as "Triple C's" or "Skittles" (Maxwell, 2007).

Most of the intentional abuse or misuse of DXM recorded by Northern New England Poison Center in 2006 involved young males under the age of 20. Of 123 total reports, 89 (72.3%) were under age 20 and 67.4% of those were male.

Anecdotal reports suggest that Coricidin misuse is common among youth, particularly female youth. Youth will take 24 to 48 pills at a time, knowing that taking 24 pills will generate an experience roughly equal to one tab of acid. Youth will buy or steal Coricidin from a grocery store or pharmacy. Some youth are shifting from using marijuana to Coricidin but are overdosing and needing to get their stomachs pumped.

ECSTASY (Methylenediozymethamphetamine or MDMA)

The 2006 MYDAUS reported that lifetime use of MDMA was 3.3% in 2006. Past month use dropped from 2.6% in 2002 to 1.3% in 2006. Some 5.8% of 12th grade students had ever used MDMA and 1.7% had used it in the past month in 2006. Rates of lifetime and past month ecstasy use were significantly higher for males in 2006. The YRBS reported a significant drop in lifetime use of ecstasy, from 9.6% in 2003 to 5.3% in 2005.

Twenty-three ecstasy exposures were reported to the Northern New England Poison Center in 2006. More than half (12) were youth age 13 to 19.

MDMA has consistently represented only a small portion of total admissions to OSA-funded treatment programs. In the second half of 2006, the total number of admissions attributable to ecstasy was 11.

The state forensic lab identified four samples as MDMA in the first half of 2007.

According to anecdotal repots, ecstasy use is common among youth in the Lewiston area. Other areas and populations of the state do not see much use of ecstasy. Users swallow these pills. Supply has increased in Lewiston during this reporting period, with dealers from Boston and New York dominating the market. Although "raves" have essentially stopped, youth have "rolling" parties in their homes, where "tripping" and "getting high" on ecstasy are the goal.

LSD AND OTHER HALLUCINOGENS

Reported lifetime and past month use of hallucinogens among students have continued on to trend downward. Where 7.7% of students in the 2000 survey reported any lifetime use of hallucinogens, only 4.2% of students reported similar use in the 2006 survey. Past month use dropped from 2.8% of students in 2000 to 1.9% of students in 2006. Rates of lifetime and past month use were significantly higher for male students in 2006.

Forty-two exposures to mescaline were reported to the Northern New England Poison Center in 2006.

LSD and other hallucinogens have consistently represented only a very small portion of all admissions to OSA-funded treatment programs, ranging from two to four admissions for each half a year since 2005.

Only four samples of psilocin were identified by the state forensic lab in the first half of 2007. Two were from Androscoggin County, one was from Aroostook County and one was from Cumberland County.

PHENCYCLIDINE (PCP)

Only three exposures to PCP were reported to the Northern New England Poison Center in 2006. Two were males age 13 to 19, and one was a female age 40 to 49.

No admissions to substance abuse treatment listed PCP as the primary drug of abuse from 2005 until the current reporting period.

OTHER ABUSED SUBSTANCES

INHALANTS

The 2006 MYDAUS reported that lifetime use of inhalants had decreased from a high of 13.2% in 2000 to 12.2% in 2006, while past month use increased slightly from 4.5% in 2000 to 4.8% in 2006. Inhalant use was more common among younger grades. Among 8th grade students, 7.1% reported past month use. In comparison, only 2.3% of 12th grade students reported past month use. Females had significantly higher rates of lifetime use of inhalants, but no significant difference existed between genders for past month use.

Inhalants consistently represent only a very small portion of all substance abuse treatment admissions to OSA-funded treatment programs, ranging from one to three admissions each half year since 2005.

Primary sources/contacts for this report:

Student substance use data from the Maine Youth Drug and Alcohol Survey - Melanie Lanctot, Research Analyst, Office of Substance Abuse, melanie.lanctot@maine.gov; (207) 287-2964

Youth Risk Behavior Survey - http://apps.nccd.cdc.gov/yrbss

Use by persons aged 12 and older data from the Substance Abuse and Mental Health Services Administration (SAMHSA) National Surveys on Substance Use and Health (NSDUH) – Jim Colliver, PhD, Division of Population Surveys, Office of Applied Studies, SAMHSA; James.Colliver@samhsa.hhs.gov ; (240) 276-1252

Poison Center data from the Northern New England Poison Center – Karen Simone, Director, simonk@mmc.org; (207)662-7221

Hospital admission data from the Maine Health Data Organization (MHDO) – Susan Schow, MPH, Epidemiologist, susan.e.schow@maine.gov ; (207) 287-6745

Treatment data from the OSA Treatment Data System (TDS) - Stacey Chandler, Office Specialist I, Office of Substance Abuse, stacey.chandler@maine.gov; (207) 287-6337

Treatment Episode Data Set (TEDS) – SAMHSA - http://www.oas.samhsa.gov

Drug and alcohol arrest data from the annual report of the Maine Department of Public Safety (http://www.maine.gov/dps/Docs/2006DPSANNREP.pdf)

Death data from the Office of Data, Research and Vital Statistics (ORDVS) – Alice Rohman, Health Planner, Office of Data, Research and Vital Statistics, Maine Center for Disease Control and Prevention, alice.v.rohman@maine.gov ; (207) 287-5451

Information on drugs identified by laboratory tests from the Department of Health and Human Services (DHHS) forensic laboratory – Chris Montagna, DHHS, chris.montagna@maine.gov ; (207) 287-1708

Information on forms of methadone and distribution of other pharmaceuticals from DEA's Automation of Reports and Consolidated Orders System (ARCOS) - http://www.deadiversion.usdoj.gov/arcos/index.html

Price, purity, trafficking, distribution and supply information provided by:
Maine Drug Enforcement Administration
http://www.maine.gov/dps/Docs/2006DPSANNREP.pdf ,
the federal Drug Enforcement Agency's Domestic Monitor Program
(http://www.usdoj.gov/dea/pubs/states/maine.html), and
the National Drug Intelligence Center's Drug Market Analysis
(http://www.usdoj.gov/ndic/pubs23/23854/23854p.pdf)

Reports by key informants on drug trends were collected by the author from a variety of law enforcement, health care, and social service professionals.